National Park Service
Coastal & Barrier Network
Technical Steering Committee
5/27-28/03 Meeting Summary

Meeting Outcomes
As a result of this meeting, members of the Network Technical Steering Committee:

- Gained an understanding of the current status of the plan and the process;
- Identified gaps in the plan and the process and made recommendations for addressing them;
- Identified future actions required to complete phase 2 and prepare for phase 3 of the project;
- Are motivated to continue to participate in the future of the project.

Program Updates
Beth Johnson gave an overview of the I & M Program from a national perspective. Sara Stevens presented an update on the status of the Inventory program and Bryan Milstead presented an update on the Monitoring Program. The following action items resulted from these presentations.

> Task: Bryan Milstead will follow up on the overall status of the data sets (geology, soils, weather) in the baseline inventory and communicate to the Technical Steering Committee.
>
> Task: Bryan Milstead and Sara Stevens will maintain contact with NE Temperate Network regarding collections. A proposal will be made for dealing with current collections.
>
> Task: Bryan Milstead will send a schedule to Park Resource Managers of parks to be visited by Scott Tiffany.

Draft Conceptual Model
Bryan presented the components of the conceptual model to the committee. The group refined the definitions for the following terms and decided the categories to be included in each element of the conceptual model.

1. Agents of Change: Major external activities or processes that influence natural systems.
   Categories:
   - Land use
   - Natural disturbance
   - Resource consumption
   - Visitor / Recreation use
   - Disaster

2. Stressors: Associated problems or products of human activities or natural events that alter the quality or integrity of the ecosystem.
   Categories:
   - Altered hydrology
   - Altered sediment processes
   - Altered atmospheric inputs
   - Altered chemical inputs
   - Invasive species
   - Over-harvesting

3. Ecosystem Responses: detectable changes in any measurable value of the ecosystem structure, function, or process.
   Categories:
   - Biotic Structure
   - Ecosystem Function
   - Physical/Chemical Environment

4. Vital Signs: Measurable characteristics used to efficiently monitor activities/processes, stressors, and ecosystem responses.

The group decided that there should be a general model, habitat specific models and project specific models.

> Task: Bryan Milstead will create a draft of the general model and send to the technical committee for review.

> Task: Habitat specific models will be created and sent to the technical committee. Bryan and Sara will work with the following individuals to draft these models.
>
> - Salt Marsh: Charles Roman
> - Estuary: Hillary Neckles
> - Fresh Water: John Portnoy
> - Beaches/spits/dunes: Mark Duffy, Carl Zimmerman
> - Uplands: Alan O'Connell

Gaps in the Monitoring Plan
The group addressed potential gaps in the Monitoring Plan and made the following decisions.

Invasive species: This does not need to be a separate program. It can be included in another category.

> Task: Bryan Milstead will get the report from Marc Albert to justify why the network is approaching invasive species this way.

Terrestrial habitats & habitat monitoring: This will be included in habitat specific monitoring.

> Decision: Form a long-term vegetation monitoring work group to determine how to turn vegetation mapping into a long-term vegetation monitoring program. This will include the development of protocols to measure vegetation change at a large scale from map products. Potential participants in the group include GIS specialists, ecologists, and members of Virginia Natural Heritage and New York Natural Heritage.

> Task: Bryan Milstead will create a scope of work for this group.

Vertebrates: After the conceptual models are developed, assess the gaps and determine if there are any vertebrates that are good indicators. Use Linda Fabre's report to assist in this process.

> Task: Bryan Milstead will send the vertebrate monitoring report to the steering committee.

Weather: Include this in the Monitoring Plan.

> Task: Bryan Milstead will write a scope of work including the following actions to be completed by May 2004.
>
> - Evaluate parks' access to applicable weather data

- Conduct an analysis of the variables
- Determine a method for harvesting data
- Create a process for data management

Night Sky & Soundscape: This would be useful for inventory purposes but there is no current need for a monitoring program.

Ground & Surface Water: Include this in the Monitoring Plan.

Task: Bryan Milstead will develop a scope of work for this by to include base flow monitoring and age dating. A central coordinator will be established to communicate with local USGS offices.

Task: Bryan Milstead will send the SOW to Chuck Rafkind who will distribute it to Virginia Water Resources, USGS Water Resources, and Dr. Tucker.

SET Monitoring: Include this in the Monitoring Plan.

Task: Bryan Milstead will develop a scope of work for this and include a write-up of this in the Phase II report.

Completion of Phase II Report
The group discussed the steps necessary to complete the phase II report.

1. Create a template for the information required for the phase II report. This will include the format, length and definitions of the terms in the general conceptual model.

   Task: Bryan Milstead will send template to work groups.

   Task: Work groups will respond by.

2. Distribute phase II report for peer review.

   Task: Bryan Milstead will send phase II report to parks for review and approval by. He will communicate the direct and indirect benefits of the monitoring program to small parks to gain their support.

   Task: Bryan Milstead will distribute the phase II report to technical advisors for peer review.

3. Rewrite after Peer review.

   Task: Bryan Milstead will revise the report to include feedback.

4. Convene fall meeting after the completion of phase II to get feedback from park management.

   Task: Bryan Milstead will schedule a meeting for park management in October or November.

Role of the Steering Committee
The group revisited the role of the technical steering committee. It was decided that the group will continue to meet once a year. The primary responsibility of steering committee members is to review and provide feedback on network documents and to attend the annual meeting and contribute input into the overall design and planning of the program.

The group suggested the following additions to the current committee membership.

- Quantitative ecologist
- USF&W representative
- NOAA representative
- Individual with remote sensing expertise